



PATENT
ATTORNEY DOCKET NO. 47237-5008-00-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Yoshikazu TANAKA et al.)	Confirmation No.: 4016
)	
Application No.: 10/583,110)	Group Art Unit: Unassigned
)	
Filed: June 15, 2006)	Examiner: Unassigned
)	
For: METHOD FOR PRODUCING YELLOW)	
FLOWER BY CONTROLLING)	
FLAVONOID SYNTHETIC PATHWAY)	

Commissioner for Patents
U.S. Patent and Trademark Office

Customer Window Mail Stop: ☐ New Application ☒ Amendment ☐ AF ☐ Issue
Fee
Alexandria, VA 22314

Sir:

INFORMATION DISCLOSURE STATEMENT (IDS)

☒ **Under 37 C.F.R. § 1.97(b):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. To the undersigned's knowledge, this IDS is being filed before the mailing date of a first Office Action on the merits, before the mailing date of a first Office Action on the merits after filing an RCE under § 1.114, or within three months of the application filing date.

☐ **Under 37 C.F.R. § 1.97(c):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. This IDS is being filed after the events recited in § 1.97(b) but, to the undersigned's knowledge, before the mailing date of a Final Office Action, a Notice of Allowance, or another action that closes prosecution in the application.

☐ The fee of \$180.00 set forth in § 1.17(p) is included herein; or

☐ Applicant submits that each item of information contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ **Under 37 C.F.R. § 1.97(d):** Pursuant to 37 C.F.R. §§ 1.56 and 1.97(d), Applicant brings to the attention of the Examiner the documents listed on the attached PTO Form 1449. This IDS is being filed after the events recited in § 1.97(c) but before payment of the issue fee.

☐ The fee of \$180.00 set forth in § 1.17(p) is included herein; and

☐ Applicant submits that each item of information contained in this IDS was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.

☐ A search report or other listing of documents from a counterpart, related, or other application dated _____ and having documents cited thereon is attached for the Examiner's consideration. Any of these documents not previously cited, and any additional documents are listed on the PTO Form 1449.

☒ Applicant respectfully requests that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. As for any document listed on the accompanying PTO-1449 that is in a language other than English, relevance can be understood from an enclosed English abstract or at least partial translation or from mention in the specification or in a search report for a corresponding application.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that any of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

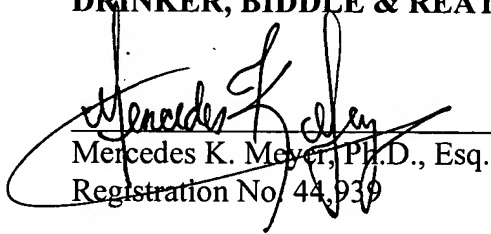
Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should any of the documents be applied against the claims of the present application.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this Application, including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required and including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

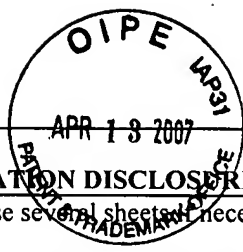
Respectfully submitted,

DRINKER, BIDDLE & REATH LLP

Dated: April 13, 2007


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INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Attorney Docket No.: 47237-5008-00-US		Serial No.: 10/583,110	
PTO Form 1449				Applicants Yoshikazu TANAKA et al.		Page 1 of 2	
				Filing Date: June 15, 2006		Group Art Unit: Unassigned	
U.S. PATENT DOCUMENTS							
*Examiner Initial		Document Number	Date	Name	Class	Sub Class	Filing Date
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub Class	<u>Translation</u> YES NO
		WO 96-25500	08/22/1996	WIPO			X
		JP 2003-289884	10/14/2003	Japan			X (abstract)
		EP 1652916	05/03/2003	EP			X
OTHER DOCUMENTS							
(Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)							
		TANAKA et al., "Metabolic Engineering to Modify Flower Color," Plant Cell Physiol. 39(11), pp 1119-1126 (1998), Japanese Society of Plant Physiologists, Kyoto, Japan					
		FORKMANN et al., "Metabolic engineering and applications of flavonoids," Curr. Opin. Biotechnol. 12:155-160 (2001)					
		HARBORNE et al., "Comparative Biochemistry of Flavonoids – I. Distribution of Chalcone and Aurone Pigments in Plants," Phytochemistry, 1966, Vol. 5, pp 111-115, Pergamon Press Ltd., England					
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		Plant Cell Physiol. Vol. 4, Supplement (2003), s158					
		DAVIES et al., "Production of yellow colour in flowers: redirection of flavonoid biosynthesis in <i>Petunia</i> ," The Plant Journal (1998), 13(2), pp 259-266, Blackwell Sciences, Oxford, England					
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		LI et al., "Phylogenetic Analysis of the UDP-glycosyltransferase Multigene Family of <i>Arabidopsis thaliana</i> ," The Journal of Biological Chemistry, Vol. 276, No. 6, Issue of February 9, 2001, pp 4338-4343, Journal of Biological Chemistry, American Society for Biochemistry and Molecular Biology, Baltimore MD					
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Examiner				Date Considered			
Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

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FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub Class	Translation YES NO
		WO 2005/017147	02/24/2005	WIPO			X (Abstract)
OTHER DOCUMENTS							
(Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)							
	YAMAZAKI et al., "Two flavonoid glucosyltransferases from <i>Petunia hybrida</i> : molecular cloning, biochemical properties and developmentally regulated expression," Plant Molecular Biology, Vol. 48, pp 401-411, 2002, Kluwer Academic, Dordrecht, Holland						
	VOGT, "Substrate specificity and sequence analysis define a polyphyletic origin of betanidin 5- and 6-O-glucosyltransferase from <i>Dorotheanthus bellidiformis</i> ," Planta (2002) 214: pp 492-495						
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	SUZUKI et al., "Flower color modification of <i>Torenia hybrida</i> by cosuppression of anthocyanin biosynthesis genes," Molecular Breeding, Vol. 6, pp 239-246, 2000, Kluwer Academic Publishers, Dordrecht, Holland						
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